

=> d his

(FILE 'HOME' ENTERED AT 13:44:19 ON 02 AUG 2001)  
FILE 'CA' ENTERED AT 13:44:25 ON 02 AUG 2001  
L1 32303 S (LYSE OR LYSING OR LYTIC OR DEGRAD? OR DECOMP?) (4A) (AGENT OR REAGENT  
OR FLUID OR LIQUID OR DILUENT OR SOLUTION)  
L2 1424 S L1 AND (ANIMAL OR MAMMAL? OR VETERINA? OR DOG OR CAT OR HORSE OR COW  
OR CATTLE OR PIG OR MOUSE OR RAT OR HAMSTER OR CHICKEN OR TURKEY OR  
RABBIT OR BIRD OR RODENT OR CANINE OR FELINE OR BOVINE OR SWINE OR  
EQUINE OR AVIAN OR POULTRY OR EAGLE OR BUZZARD OR FISH OR BEAR)  
L3 90 S L2 AND (WBC OR BLOOD CELL OR LEUKOCYTE OR LYMPHOCYTE OR GRANULOCYTE  
OR MONOCYTE OR NEUTROPHIL OR EOSINOPHIL OR BASOPHIL)  
L4 542 S LYSIS (4A) (AGENT OR REAGENT OR FLUID OR LIQUID OR DILUENT OR  
SOLUTION)  
L5 175 S L4 AND (ANIMAL OR MAMMAL? OR VETERINA? OR DOG OR CAT OR HORSE OR COW  
OR CATTLE OR PIG OR MOUSE OR RAT OR HAMSTER OR CHICKEN OR TURKEY OR  
RABBIT OR BIRD OR RODENT OR CANINE OR FELINE OR BOVINE OR SWINE OR  
EQUINE OR AVIAN OR POULTRY OR EAGLE OR BUZZARD OR FISH OR BEAR)  
L6 30 S L5 AND (WBC OR BLOOD CELL OR LEUKOCYTE OR LYMPHOCYTE OR GRANULOCYTE  
OR MONOCYTE OR NEUTROPHIL OR EOSINOPHIL OR BASOPHIL)  
L7 57 S L3, L6 NOT PY>1992  
FILE 'BIOSIS' ENTERED AT 14:01:34 ON 02 AUG 2001  
L8 60 S L7  
FILE 'MEDLINE' ENTERED AT 14:03:01 ON 02 AUG 2001  
L9 72 S L7  
FILE 'CA' ENTERED AT 14:03:47 ON 02 AUG 2001  
L10 8 S L2, L5 AND (WHOLE OR RED) (W) BLOOD NOT L3, L6  
FILE 'BIOSIS' ENTERED AT 14:06:05 ON 02 AUG 2001  
L11 19 S L10  
FILE 'MEDLINE' ENTERED AT 14:10:50 ON 02 AUG 2001  
L12 7 S L10  
FILE 'CA, BIOSIS, MEDLINE' ENTERED AT 14:12:09 ON 02 AUG 2001  
L13 160 DUP REM L7 L10 L8 L11 L9 L12 (63 DUPLICATES REMOVED)

=> d 113 bib, ab 1-160

L13 ANSWER 24 OF 160 BIOSIS COPYRIGHT 2001 BIOSIS  
AN 1993:30041 BIOSIS  
DN PREV199395018241  
TI Flow cytometric analysis of P-glycoprotein in normal and leukemic cells.  
AU Tiirikainen, M. I. (1); Syrjala, M. T.; Jansson, S.-E.; Krusius, T.  
CS (1) Finnish Red Cross Blood Transfusion Service, Kivihaantie 7, SF-00310  
Helsinki Finland  
SO Annals of Hematology, (1992) Vol. 65, No. 3, pp. 124-130.  
AB Classical multidrug resistance is characterized by overexpression of a  
membrane protein, P-glycoprotein, which acts like a drug-extruding pump,  
reducing accumulation of cytotoxic drugs inside malignant cells. We have  
developed a simple method for detecting an intracellular epitope of P-  
glycoprotein in normal and leukemic cells by the monoclonal antibody JSB-1  
and fluorescence-activated flow cytometry. Permeabilization of blood and  
bone marrow cells in unprocessed samples is achieved by a commercially  
available red blood cell lysing solution which excellently preserves the  
light scatter properties of leukocytes. The method is suitable for  
analyzing samples in clinical routine. Lower than 1% reactivity was seen in  
the lymphoid gate of normal peripheral blood and bone marrow samples as  
compared with over 60% of reacting cells in some leukemic samples. Twelve  
patients with acute de novo leukemia were studied at presentation, 13  
patients at a refractory stage, and 28 in remission. There was a positive

correlation between the P-glycoprotein and the CD 34 expression in acute myelogenous leukemia and an association between the P-glycoprotein expression and the blast count in both acute myelogenous and lymphatic leukemias.

✓  
L13 ANSWER 27 OF 160 CA COPYRIGHT 2001 ACS  
AN 115:66247 CA  
TI Method for measuring DNA damage in single cells  
IN Thomas, Charles A., Jr.; Thomas, Eric A.  
PA Pantox Corp., USA  
SO U.S., 12 pp.  
PI US 5006460 A 19910409 US 1988-198995 19880526  
AB A method of measuring chain breakage in the DNA of an eucaryotic cell is disclosed. This method includes (a) contacting the cell with a stripping soln. that lyses and solubilizes the cell without denaturing its DNA, thereby forming a nucleoid having a halo, (b) measuring the width of the halo, and (c) detg. the no. of chain breaks from the measured width. The halo includes at least one loop of undenatured DNA, and has a width related to the no. of DNA chain breaks in the loop. The cell to be examd. may be adhered to a support prior to its contact with the stripping soln.

L13 ANSWER 28 OF 160 CA COPYRIGHT 2001 ACS  
AN 115:67977 CA  
TI Method for reducing blood carbon dioxide background in media for blood tests for microorganisms by the addition of micelles of saponin and a phospholipid  
IN Berger, Dolores M.; Goldenbaum, Paul E.; Tice, Gregory  
PA Becton, Dickinson and Co., USA  
SO U.S., 17 pp.  
PI US 4994378 A 19910219 US 1989-404475 19890908  
AB In testing blood samples for the presence of microorganisms, a nonionic lytic agent, preferably saponin, is used for reducing background CO2 produced by blood cell metab. The hemolytic agent saponin is combined with a phospholipid, preferably L-.alpha.-lecithin (phosphatidylcholine), to form mixed micelles which protect saponin from the effects of heat sterilization and high blood cholesterol levels, thus maintaining the lytic activity of saponin. The phospholipid/saponin mixed micelles may be used in nonradiometric or radiometric culture media. The micelle-contg. medium of the invention was used to test for growth of Haemophilus influenza in blood sample.

L13 ANSWER 31 OF 160 CA COPYRIGHT 2001 ACS  
AN 116:39377 CA  
TI Characterization of a new monoclonal anti-FcγRII antibody, AT10, and its incorporation into a bispecific F(ab')<sub>2</sub> derivative for recruitment of cytotoxic effectors  
AU Greenman, J.; Tutt, A. L.; George, A. J. T.; Pulford, K. A. F.; Stevenson, G. T.; Glennie, M. J.  
CS Tenovus Lab., Gen. Hosp., Southampton, SO9 4XY, UK  
SO Mol. Immunol. (1991), 28(11), 1243-54  
AB Fcγ RII (CDw32) on monocytes is capable of triggering both phagocytosis and lysis of chick red blood cells (CRBC) coated with antibody of the appropriate isotype. In this report the authors describe the prodn. and characterization of a mouse monoclonal IgG1 antibody specific for Fcγ RII and compare its activity in binding studies, tissue distribution and redirected cellular cytotoxicity (RCC), with the previously identified anti-Fcγ RII antibodies KB61 and IV.3. Immunohistochem. and flow cytometry analyses demonstrated that AT10 binds very strongly to FcγRII on normal

QR180.152  
Ademic

monocytes, but only weakly to that expressed on lymphocytes. This pattern does not correspond to the staining seen with either KB61 or IV.3, and appears to give an intermediate profile. The binding const. ( $K_a$ ) for Fab' fragment of AT10 was calcd. at  $5.3 \times 10^8 M^{-1}$ , 4-fold higher than that for KB61 ( $1.4 \times 10^8 M^{-1}$ ). Bispecific F(ab')<sub>2</sub> antibodies were constructed from Fab' fragments of AT10 or KB61 thioether-linked to Fab' from an anti-CRBC monoclonal antibody. These bispecific derivs. directed monocyte cytotoxicity against CRBC as efficiently as either a monoclonal or polyclonal anti-chick erythrocyte antibody. The bispecific F(ab')<sub>2</sub> antibodies had a distinct advantage over the conventional reagents, in that they were not blocked in the presence of human Fc $\gamma$  at 3.5 mg/mL (a concn. comparable with that provided by IgG in serum). Therefore, bispecific derivs. constructed with the high affinity anti-Fc $\gamma$ RII antibody, AT10, may be used as therapeutic reagents for targeting tumor cell lysis in vivo.

L13 ANSWER 35 OF 160 CA COPYRIGHT 2001 ACS

AN 114:182503 CA

TI Lytic activity from schistosomes: interactions with blood cells

AU Kasschau, Margaret R.; Gentry, Deborah L.; Byam-Smith, Mary P.

CS Dep. Biol. Allied Health Sci., Univ. Houston, Houston, TX, 77058, USA

SO Comp. Biochem. Physiol., B: Comp. Biochem. (1991), 98B(2-3), 195-200

AB The schistosome lytic agent hemolyzed animal red blood cells (RBCs) contg. high concns. of membrane phosphatidylcholine (dog, mouse, and rat) more efficiently than RBCs having no phosphatidylcholine (goat and sheep). Human mononuclear cells lost viability in the presence of the schistosome lytic agent. Preincubating the lytic agent with phosphatidylcholine or bovine serum albumin reduced its lytic activity. Extracellular albumin protected the RBCs from schistosome induced hemolysis. Pretreatment of the RBCs with various proteases enhanced lysis by 10-30%.

L13 ANSWER 56 OF 160 MEDLINE

AN 88328388 MEDLINE

TI Comparative effects of sugars on the hemolytic activity of Schistosoma mansoni and other hemolytic agents.

AU Kasschau M R; Prill M S

CS Division of Biological and Allied Health Sciences, University of Houston-Clear Lake, Texas 77058.

SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. A: COMPARATIVE PHYSIOLOGY, (1988) 90 (3) 453-8.

AB 1. The rate of red blood cell lysis by the hemolytic agent in adult worm homogenates of Schistosoma mansoni is slowed in the presence of added sugars (50 mM). 2. Trisaccharides were the most effective in slowing and reducing lysis. Disaccharides were more effective than monosaccharides. 3. The addition of sodium, potassium or lithium chloride salts (25 mM) stimulated hemolysis by the S. mansoni agent. 4. Hemolysins with known mechanisms were tested to determine the effects of added sugars (50 mM) or salts (25 mM). 5. The S. mansoni hemolytic agent responds to the addition of sugars and salts in a manner similar to small membrane pore formers.

L13 ANSWER 64 OF 160 CA COPYRIGHT 2001 ACS

AN 108:202348 CA

TI Spontaneous hemolytic activity of rat alveolar lining material

AU Quesneau-Guilmont, Brigitte; Masliah, Joelle; Alcindor, Louis G.; Bignon, Jean; Lambre, Claude R.

CS Equipe Immunopathol. Pulm., Hop. Henri Mondor, Creteil, 94010, Fr.

SO Lung (1988), 166(2), 85-95

AB During assays of the complement hemolytic activity in lavage fluids (LF) from humans and various lab. animals (hamsters, rabbits, rats, guinea

pigs), it was obsd. that rat bronchoalveolar lavages had a spontaneous, complement-independent, hemolytic activity on sheep red blood cells (SRBC). Rat lavage fluids were able to lyse sheep and autologous red blood cells at 2° as well as at 37°. Together with these observations, the inverse relationship that existed between the LF hemolytic activity and the Ca concn. in the incubation medium suggested that lysis could be due to the presence of large amts. of lysophospholipids in rat lavage fluid. However, TLC did not reveal any abnormal amt. of lyso derivs., whereas the free fatty acid (FFA) content was very high. Pure palmitic acid, at a concn. similar to that obsd. in LF from rat, was able to lyse SRBC (8.5 µg lysed 50% of 108 SRBC); its lytic activity decreased when Ca<sup>2+</sup> or bovine serum albumin was added to the incubation mixt. FFA, through their detergent effect, appear to account for the hemolytic activity of the rat alveolar lining material.

L13 ANSWER 72 OF 160 BIOSIS COPYRIGHT 2001 BIOSIS  
AN 1988:249265 BIOSIS  
TI EVALUATION OF LEUKOCYTE NUMBER BY USING AN AUTOMATED BLOOD CELL COUNTER AND A TRADITIONAL HEMATOLOGICAL METHOD IN ANIMALS IRRADIATED WITH GAMMA RAYS.  
AU MACKOVA N; MISUROVA E  
CS LEHRSTUHL FUER ALLGEMEINE BIOLOGIE, DER NATURWISSENSCHAFTLICHEN, UNIV. P. J. SAFARIK, MOYZESOVA 11, CS-KOSICE, CSSR.  
SO FOLIA HAEMATOL (LEIPZ), (1987) 114 (6), 810-816.  
AB Female mice were irradiated with a single whole body dose of 7 Gy of γ-rays. Leukocyte numbers were monitored in the peripheral blood using automated blood cell counter Coulter counter and a traditional hematological method with a light microscope in the Burkner chamber. Reticulocyte numbers, RNA blood concentration, spleen weight and morphological changes in spleen and bone marrow were also studied. In the period between 15th-19th days after irradiation the numbers of leukocytes obtained by CC counting were manifold higher than those obtained by microscope counting. Since this period is characterized by a steep increase in the reticulocyte number and RNA concentration in blood as well as by increased weight of spleen as the result of marked regeneration of extramedullary erythropoiesis, leukocytes as well as reticulocytes are assumed to be additionally registered by the automated counter CC in this period, probably due to a higher resistance of reticulocytes to the lysing agent Zapoglobine.

L13 ANSWER 80 OF 160 BIOSIS COPYRIGHT 2001 BIOSIS  
AN 1986:282728 BIOSIS  
DN BA82:26591  
TI SCHISTOSOMA-MANSONI CHARACTERIZATION OF HEMOLYTIC ACTIVITY FROM ADULT WORMS.  
AU KASSCHAU M R; DRESDEN M H  
CS PROGRAMS SCI., UNIV. HOUSTON-CLEAR LAKE CITY, HOUSTON, TX 77058, USA.  
SO EXP PARASITOL, (1986) 61 (2), 201-209.  
AB Homogenates of adult Schistosoma mansoni worms contain a hemolytically active component(s). Centrifugation at 10,000 g shows the major activity is present in the pellet fraction. Red blood cell lysis with the schistosome hemolytic agent is optimal at acid pH (5.0) and highly temperature dependent. The hemolytic component is resistant to boiling (5 min) and stable for extended periods of time at 38 C (22 hr). The length of the lag phase prior to hemolysis and the rate of hemolysis are both concentration and temperature dependent. Following hemolysis, red blood cell ghosts remain.

L13 ANSWER 96 OF 160 BIOSIS COPYRIGHT 2001 BIOSIS  
AN 1985:274815 BIOSIS  
TI DEFICIENCIES AND IMPROVEMENT OF METHEMOGLOBIN ASSAY.

AU ANDERS J C; CHUNG H  
CS BIOCHEM. PHARMACOL. BRANCH, DIV. EXP. THERAPEUTICS, WALTER REED ARMY INST.  
RES., WASHINGTON, D.C. 20307.  
SO J ANAL TOXICOL, (1984) 8 (6), 260-262.  
AB [This assay was used during the preliminary study of the methemoglobinemia potential of primaquine and some 8-aminoquinoline antimalarials in dogs. In the course of the experiment, highly variable results were encountered by using the assay. After careful evaluation and investigation, environmental effects on the dogs, blood sampling and other techniques were not found to be possible sources of errors. A deficiency in the MHB assay methodology itself was suspected as the error source.] A day-to-day variability in results was encountered when using the Dubowski method for the routine clinical determination of methemoglobin in blood. Studies were performed to determine the source(s) of variability in the method as described by Dubowski. It was determined that complete lysing of red blood cells was dependent on temperature of the buffer and the amount of lysing agent. Low buffer temperatures (< 14° C) produced highly variable results. This variability was reduced by increasing the level of lysing agent to 40 mg/20 ml of diluted blood. It was found that by using 37° C buffer solution temperature and 40 mg Triton X-100 as lysing agent/20 ml of diluted blood (1:20 with 0.25 M sodium phosphate buffer, pH 7.4), the precision (percent coefficient of variation = 2%) and the accuracy (percent coefficient variation = 5.5%) were excellent.

L13 ANSWER 106 OF 160 CA COPYRIGHT 2001 ACS  
AN 98:104596 CA  
TI Hemagglutinins and hemolysins in the body fluids of Neoamphitrite figulus and Arenicola marina (Annelida: Polychaeta)  
AU Dales, R. P.  
CS Dep. Zool., Bedford Coll., London, NW1 4NS, UK  
SO Comp. Biochem. Physiol. A (1982), 73A(4), 663-7  
AB Body fluids of some individual A. marina possessed weak agglutinating activity, but some did not agglutinate any of the vertebrate red blood cells tested. Although some individual variation was found, coelomic fluids showed highest titers towards rabbit red blood cells (RRBC) and most also agglutinated rat and guinea pig red cells. No lysis of horse (HRBC) or chick red cells was found. The coelomic fluid of N. figulus showed lytic and agglutinating activity towards a wider range of vertebrate red cells than that of A. marina. RRBC were the most easily lysed of those tested, but the highest agglutinin titers were obtained with HRBC. Polychaete blood showed less agglutinating activity, but all samples tested also agglutinated HRBC. The lysis titer of N. figulus coelomic fluid was considerably reduced by 1.0 mM EDTA when tested against sheep (SRBC) or RRBC and was sensitive to heat (60°, 30 min). The agglutinating activity was not Ca<sup>2+</sup>/Mg<sup>2+</sup> dependent and was somewhat resistant to heat. There was some inhibition of activity by all sugars tested, esp. by N-acetylated and Me sugars. Preliminary expts. in which N. figulus were injected with SRBC or RRBC suggested some specificity of absorption of the lysis, as repeated injection reduced the titer, but the agglutinin titer was not affected, nor was there any evidence of enhancement 24 h postinjection.

L13 ANSWER 112 OF 160 CA COPYRIGHT 2001 ACS  
AN 97:213465 CA  
TI Age-related increase in erythrocyte oxidant sensitivity  
AU Tyan, Marvin L.  
CS Wadsworth Med. Cent., Med. Res. Serv. Vet. Adm., Los Angeles, CA, 90073, USA  
SO Mech. Ageing Dev. (1982), 20(1), 25-32

AB Unlike erythrocytes from elderly humans, red blood cells from old mice are not more sensitive than are cells from young animals to lysis in hypotonic solns., probably because the mean corpuscular vol. decreases rather than increases with age in this species. However, when subjected to an oxidant stress (Na ascorbate), red blood cells from old animals accumulate more metHb and fewer remain intact than is the case with red blood cells from young mice. This increased vulnerability to oxidative damage appears to be manifest relatively early in the lifespan of red blood cells from old animals and is not solely a property of the older cells. The pathogenesis of the decreased resistance to peroxidn. is not known, but it does not appear to be the result of changes in GSH, NADH:metHb reductase, superoxide dismutase, glutathione reductase, glutamic-oxalacetic transaminase, or glucose 6-phosphodehydrogenase.

L13 ANSWER 122 OF 160 CA COPYRIGHT 2001 ACS

AN 91:35403 CA

TI Trypanosoma cruzi, Leishmania donovani, and L. mexicana: extract factor that lyses mammalian cells

AU O'Daly, Jose A.; Aso, Pedro M.

CS Cent. Microbiol. Cell Biol., Venez. Inst. Invest. Sci., Caracas, Venez.

SO Exp. Parasitol. (1979), 47(2), 222-31

AB Cell-free exts. of T. cruzi, L. donovani, and L. mexicana, cultivated in medium supplemented with 5% fetal calf serum, contained a factor that induced lysis of mammalian red blood cells and Vero cells. All the lytic activity was in the insol. fraction of parasite exts. obtained after centrifugation at 100,000 g for 2 h. The lytic agent was pronase, trypsin, and temp. resistant. The optimum pH of the lytic effect was pH 6.5. Normal red blood cells of several mammalian species had different sensitivities to the agent. The lipid phase of T. cruzi ext. contained the total lytic activity. Albumins of different animal species at 1 mg/mL, completely inhibited the lytic activity of the exts.

L13 ANSWER 159 OF 160 CA COPYRIGHT 2001 ACS

OREF 49:5555i,5556a-i

TI A physical-chemical study of hemolysis

AU Croes, R.

SO Verhandel. Koninkl. Vlaam. Acad. Wetenschap. Belg., Kl. Wetenschap. (1953), No. 43, 5-152

AB cf. C.A. 48, 8924e. The following lytic agents were studied: Saponin (I), digitonin (II), cetyltrimethylammonium bromide (III), sodium cetylsulfate (IV), and sodium laurylsulfate (V). Human, citrated blood was centrifuged and the cells washed in isotonic NaCl soln. until the supernatant was colorless or light yellow. The erythrocytes were suspended in isotonic NaCl soln. adjusted to contain  $3 \times 10^8$  cells per ml. The concns. of the lytic agents were so adjusted that complete hemolysis took place in about half of each diln. series. The tests were carried out by placing varying amts. (1.60-0.2 ml.) of the lytic agent in a test tube, adding H<sub>2</sub>O to 1.60 ml. vol., 1.6 ml. buffer pH 7.4 (phosphate or borate) made double isotonic with NaCl, and finally 0.8 ml. of the blood cell suspension. After mixing the tubes were placed at 25° and the speed of hemolysis was measured in a nephelometer. The alk. earth cations Ca, Mg, Sr, and Ba increased the speed of hemolysis with I in the following order Mg, Ca < Sr < Ba; the increase was dependent upon concn. The same 4 ions delayed the hemolysis with II, the higher the concn. the greater the inhibition; the order of activity was Ba < Sr < Ca < Mg. On hemolysis with III, the 4 ions had little or no effect. With IV and V, Mg and Ca increased the speed of hemolysis in all dilns. The hemolytic index (H.I.), the diln. of the lytic agent used which just gives complete lysis, was increased in the presence

of the alk. earth ions. In the presence of these ions, the erythrocytes increased in resistance to hemolysis in hypotonic solns. Hexolnitrate ( $1.25 \times 10^{-4}$  to  $1.25 \times 10^{-3}$  mole/l.) increased the speed of hemolysis with I, had no effect with II, increased it with III, and had no effect in hypotonic solns. A uranyl ion concn. of  $0.5 \times 10^{-4}$  mole/l. increased the speed of hemolysis with I, II, and III, but in a concn. of  $5 \times 10^{-4}$  hemolysis was completely inhibited. With  $\text{Na}^+$  as the common cation, the following anions showed less effect than the cations mentioned above, and the following order was observed: citrate <  $\text{SO}_4^{2-}$  <  $\text{Cl}^-$  <  $\text{PO}_4^{3-}$  < borate with I, and with II they were without effect. With III the order was  $\text{BO}_3^-$  <  $\text{Cl}^-$  <  $\text{PO}_4^{3-}$  <  $\text{SO}_4^{2-}$  < citrate. If the pH was decreased from 7.6 to 4.1, the speed of hemolysis was increased with a like increase in H.I. with the use of I; with II and III there was very little effect. In the presence of isotonic sucrose, there was a decrease in the speed of hemolysis with I, little effect with II and III, and a large decrease with IV and V. With the use of isotopically labeled lytic agents, it was demonstrated that the lytic agent was adsorbed on the erythrocytes. In the case of V on cattle blood and on human blood, the adsorption amounted to  $1.15 \times 10^8$  mols. and  $1.74 \times 10^8$  mols., resp., per red blood cell. Similar results were obtained with IV. In hemolysis of erythrocytes in the presence of the plasma components, more lytic agent was required, since less adsorption took place. The proteins and lipides of the plasma adsorbed lytic mols. When NaCl was replaced with sucrose in the suspension of erythrocytes, much more IV and V were required for lysis. With 20  $\gamma$  lytic agent per ml., no lysis took place either in NaCl or in sucrose suspensions; with 40  $\gamma$ /ml., 100% hemolysis was found with NaCl and none with sucrose. In the presence of  $\text{MgCl}_2$  instead of NaCl, hemolysis was much faster and a high H.I. was found. This was caused by a decrease in the elec. charge of the erythrocytes. The no. of erythrocytes in suspension did not change the amt. of lytic agent adsorbed. With the no. of erythrocytes from  $40 \times 10^8$  to  $20 \times 10^8$ ,  $1.45 \times 10^8$  to  $1.40 \times 10^8$  mols. of IV were adsorbed per erythrocyte. With use of  $\text{C}^{14}$ -labeled acetyldeoxycholic acid (VI) ( $\text{C}^{14}$  in acetyl) as lytic agent, less of VI was adsorbed than when alkyl sulfates were used. For 50% hemolysis,  $0.45 \times 10^8$  mols. of VI per cell were adsorbed. When labeled V and VI were added to a suspension of (Jena) glass powder with a surface corresponding approx. to  $20 \times 10^8$  erythrocytes, V was practically not adsorbed whereas VI was adsorbed to a considerable extent, showing that the adsorption on the erythrocytes was a specific effect. With a concn. of  $0.025 \times 10^8$  erythrocytes per ml., V caused lysis with 3  $\gamma$ /ml., VI with 40  $\gamma$ /ml., and Na oleate with 10  $\gamma$ /ml., whereas III and II gave lysis in all concns. investigated down to 0.5  $\gamma$ /ml. The length of the C chain had little effect on the no. of moles required for hemolysis; the polar end-group was more important,  $-\text{N}(\text{CH}_3)_3^+$  being more active than  $-\text{OSO}_3^-$ , and this more active than  $-\text{COO}^-$ . No relation was found between the surface tension of the lytic soln. used and its hemolytic activity. Cf. Ponder, C.A. 43, 4361g; Ponder and Marsland, C.A. 30, 1078.5.

=> log y

STN INTERNATIONAL LOGOFF AT 14:15:24 ON 02 AUG 2001